

STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER MANAGEMENT  
PERMITTING, ENFORCEMENT & REMEDIATION DIVISION  
79 ELM STREET, HARTFORD, CT 06106-5127

## Environmental Condition Assessment Form

Please complete this form in accordance with the instructions  
(DEP-PERD-PTP-INS-200). Print or type unless otherwise noted.  
Use an addendum page if necessary.

DEP USE ONLY

☒ Please enter a check mark if this form is being submitted with a  
property transfer filing under CGS Section 22a-134a.

☒ Please enter a check mark if addendum sheets are attached.

### Part I: Site Information

1. Name of site: Arch Chemicals, Inc.

Street Address or Description of Location: 350 Knotter Drive

City/Town: Cheshire State: CT Zip Code: 06410

2. EPA ID #: CTD 98016799

DEP-WPC #: \_\_\_\_\_

3. Fill in the name of the business/person submitting this form:

Name: Arch Chemicals, Inc.

Mailing Address: 350 Knotter Drive

City/Town: Cheshire State: CT Zip Code: 06410

Business Phone: 203-271-4000 ext. 4076 Fax: 203-271-4367

Authorized Representative: John Lesky Title: Responsible Care Mgr.

4. Fill in the name of the person who will serve as primary contact for the CT DEP:

Firm: Arch Chemicals, Inc.

Mailing Address: P. O. Box 800, 1200 Lower River Road

City/Town: Charleston State: TN Zip Code: 37310-0800

Business Phone: 423-780-2541 ext. NA Fax: 423-780-2505

Primary Contact: Dan Bennewitz Title: Manager, Environmental Svcs

5. Fill in the name of the owner of the site, if different from the name and address in item 3 above:

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Business Phone: \_\_\_\_\_ ext. \_\_\_\_\_ Fax: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

## Part I: Site Information (cont.)

6. Fill in the name of the environmental consultant employed or retained to assist in either the completion of this form, or the investigation or remediation activities at the site. If there are more than one, please attach an addendum with the requested information for each environmental consultant.

Name: GZA GeoEnvironmental, Inc.

Mailing Address: 27 Naek Road

City/Town: Vernon State: CT Zip Code: 06066

Business Phone: 860-875-7655

ext. \_\_\_\_\_

Fax: \_\_\_\_\_

Contact Person: Tom Stark

Title: Principal

Service Provided: Phase I and Phase II Assessments

## Part II: Site History, Waste Management History

1. Summary of industrial/commercial history of site (present and former use, including dates and SIC codes):

Siemens, 1975-1983, Medical Device Manufacturing

Olin Corporation, 1983-1999, Research & Development

Arch Chemicals, 1999-Current, Research & Development

2. Hazardous substances or petroleum products presently or formerly handled at the site (list materials & management method):
- 1) Variety of chemicals and hazardous waste,
  - 2) Fuel oil in an underground storage tank

RCRA Notifier Status: Large Quantity Generator RCRA Permit Status: Interim Status Storage Unit

4. Has any enforcement action been taken by CT DEP or EPA regarding waste handling practices at the site, or requiring remediation at the site? ☐ Yes ☒ No

If yes, list action type, date, number, name of party, purpose & status:

An EPA and CDEP inspection in the late 80's resulting in an Administrative Order. Olin appealed the Order and it was eventually dropped.

5. Releases reported to CT DEP Oil & Chemical Spills? ☒ Yes ☐ No

If yes, list date, material released and quantity:

See attached

6. Previous Form filings with CT DEP Property Transfer Program? ☒ Yes ☐ No

If yes, list form & date:

Form I submitted by Olin but not accepted by CDEP.

See attached.

7. CT DEP staff involved with assessment or remediation of the site:

NA

## Part II: Site History, Waste Management History (cont.)

8. List any release areas or potential release areas on the site, and for each describe the nature of the release, the date and estimated duration of the release, and an estimated volume of the release. For each release area or potential release area indicate whether the area has been investigated or remediated.

No hazardous waste releases are known to have occurred at the site.  
A fuel oil release from a UST did occur, but was quickly remediated.  
A Phase I and Phase II environmental assessment is attached.

## Part III: Environmental Setting

### 1. Ground Water -

Ground-water classification: Class GB

- a. Is the ground water on the site used for:

No drinking water No agricultural uses No industrial purposes

- b. What is the distance from the site to the nearest off-site well, other than a monitoring well?

Approx. 1 mile (See attached assessment, Sec. 3.10)

- c. Is the site within the zone of contribution of a public water supply well?     Yes X No

### Surface Water -

Surface-water classification:

- a. Identify the nearest down-gradient surface-water body: Tenmile River, streams at property boundary

- b. What is the distance from site to the nearest surface water: Immediately adjacent

### 3. Public Utilities

- a. Is public water provided to the site? X Yes     No

Is public water unavailable to any developed area surrounding the site? X Yes     No

- b. Is the site connected to municipal sewers? X Yes     No

- c. Are or have on-site septic system(s) been used at the site? X Yes     No

If yes, dates in use: 1975 to 1984

4. Describe the land use on the site and in the area surrounding the site. Identify any sensitive land uses within 1/2 mile of the site?

Site use - Research & Development

Adjacent uses - light industrial

### Part III: Environmental Setting (cont.)

5. Provide a brief geologic and hydrogeologic summary of the site and surrounding area:

See Sections 3.20 and 3.30 of attached assessments

### Part IV: Environmental Assessment

1. Field investigation/ Environmental Assessment:

a. Date(s) performed: Phase 1: Oct. 1999 Phase 2: Oct-Dec 1999 Phase 3: \_\_\_\_\_

b. Potential release areas (#): Identified: 11 Tested: All Released detected: None confirmed

2. Soil Investigation:

a. How many of soil samples were screened/analyzed?

Waste 0 / 0 Shallow soil 6 / 5 Soil > 2' deep 1 / 0

b. What techniques were used to investigate soil?

\_\_\_\_ Soil gas survey Other surveys (specify): \_\_\_\_\_

Subsurface sampling techniques (specify): Split-spoon sampling hand auger

Ground Water Investigation:

a. How many samples of ground water and how many rounds of sampling were used in the investigation?

14 samples, 2 rounds of sampling

b. How many monitoring wells were used to investigate the ground water? 11

For each well list the well number, type of well, and geologic unit that the well is screened in or open to. Use an addendum sheet, if necessary. (Refer to instructions)

Wells were numbered GZ1-GZ11. Two-inch diameter wells were drilled with a hollow-stem auger. All wells were slotted, 2-inch PVC wells screened at 12 feet below grade. See Section 12.30 for more detail.

c. How many other types of wells were used? Provide the type and address for each well.

None

d. Is the extent of each ground-water plume resulting from releases at the site fully characterized?

X Yes \_\_\_\_ No

e. What techniques were used to investigate the ground water?

X Ground water quality testing \_\_\_\_ Pump testing \_\_\_\_ Geophysical logging

Other techniques (specify): \_\_\_\_\_

Indicate phases of environmental assessment completed to date:

X Investigation \_\_\_\_ Remedial design \_\_\_\_ Remediation \_\_\_\_ Post-remedial Monitoring

## Part V: Contaminants in the Environment

1. Contaminated Soil or Wastes on the Site - List the contaminant codes for substances detected in waste or soil on the site and for each contaminant the highest concentration detected: (Note where not applicable "NA" or not tested "NT")
  - a. Waste or waste residue: NT
  - b. Soil: No indication of contaminants
2. Contaminated Ground Water Resulting from Releases on the Site - List the contaminant codes for substances detected in ground water and for each contaminant the highest concentration detected: (Note where not applicable "NA" or not tested "NT")
  - a. Ground water in overburden on-site: TL-2000 ppb; EBZ-230 ppb; XYL-580 ppb; TCFM-20 ppb; 1,1-DCE-190 ppb; CFM 400 ppb
  - b. Ground water in overburden off-site: NT
  - c. Ground water in bedrock on site: NT
  - d. Ground water in bedrock off-site: NT
3. Contaminated Surface Water Resulting from Releases on the Site - List the number of surface water samples taken; contaminant codes for substances detected resulting from releases on the site; and for each contaminant the highest concentration detected.

NT

Non-Aqueous Phase Liquids (NAPL) - Describe whether NAPLs resulting from a release at the site are present or potentially present in the following settings:

- a. Are NAPLs present in the unsaturated zone? ☐ Yes ☒ No ☐ Potentially  
Product(s): \_\_\_\_\_
- b. Are NAPLs present in unconsolidated material below the water table?  
☐ Yes ☒ No ☐ Potentially  
Product(s): \_\_\_\_\_
- c. Are NAPLs present in the bedrock below the water table? ☐ Yes ☒ No ☐ Potentially  
Product(s): \_\_\_\_\_

5. Briefly describe the extent and distribution of contaminated soil/waste, ground water, surface water and/or NAPLs resulting from releases on the site.

Groundwater in one well (GZ3) has low level contaminants indicative of a prior release of a petroleum product. No contaminants were above GB aquifer standards.

**Part V: Contaminants in the Environment (cont.)**

6. List for each release area the codes for contaminants of concern, and for each contaminant the following: the number of samples in which the contaminant was detected / the maximum and typical concentrations of the contaminant / and depth at which the maximum concentration was detected: (X Enter a check if an addendum table is used.)

Provide site name, address and town from Part I, Item 1: Arch Chemicals, Inc.


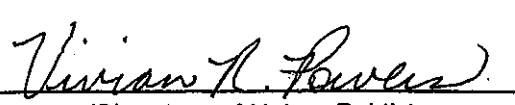
Release Area	Contaminants of concern tested	Contaminants in soil/waste	Contaminants in ground water	Contaminants in surface water
Well GZ3	11DCA	X	12-foot depth 200-300 ppb 2 samples	X
Well GZ3	TCFM	X	12-foot depth 0-20 ppb 2 samples	X
Well GZ3	XYL	X	12-foot depth 580-700 ppb 2 samples	X
Well GZ3	TL	X	12-foot depth 1300-2000 ppb 2 samples	X
Well GZ7	CFM	X	12-foot depth 200-400 ppb 2 samples	X

## Part VI: Supporting Documents

1. ☒ Site Map attached Latitude & Longitude (d/m/s): N: \_\_\_\_\_ W: \_\_\_\_\_
- Enter a check mark for features included on Site Plans: Number of sheets attached: \_\_\_\_\_
- |   |   |                                    |
|---|---|------------------------------------|
| <input checked="" type="checkbox"/> structures/boundaries     | <input checked="" type="checkbox"/> potential release areas | _____ areas remediated             |
| <input checked="" type="checkbox"/> material management areas | <input checked="" type="checkbox"/> sampling locations      | _____ water table elevations       |
| <input checked="" type="checkbox"/> waste management areas    | <input checked="" type="checkbox"/> monitoring wells        | _____ limits of ground-water plume |
| <input checked="" type="checkbox"/> UST and AST locations     | _____ release areas   | _____ topography/drainage          |
3. Site Size: Acres: 75 Acres undeveloped: 30  
% impervious: 20% Building sq. footage: 144,700
4. This assessment is based on the following reports (title; date; consultant): *Make note of whether the report is on file with DEP - "\*" Note by using "+" if report is attached.*  
Phase I and Phase II Environmental Site Assessment+  
November 1999  
GZA GeoEnvironmental, Inc.

## Part VII: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments, and certify that based on reasonable investigation the submitted information is true and accurate to the best of my knowledge and belief. I certify that this form is complete and accurate as prescribed by the Commissioner without alteration of the text."

		<u>5/16/00</u>	
Authorized Signature (as specified in instructions)		Date	
<u>Dan Bennewitz</u>		<u>Manager, Environmental Services</u>	
Name of Authorized Representative (print or type)		Title (if applicable)	
<u>P. O. Box 800</u>		<u>Charleston, TN 37310</u>	
Mailing Address		City/Town	State Zip
<u>Arch Chemicals, Inc.</u>			<u>423/780-2541</u>
Relationship to [transfer/parcel] and company name, if applicable		Phone Number	
STATE OF <u>Tennessee</u>		ss. <u>Charleston, TN</u>	
COUNTY OF <u>Bradley</u>		(Town)	
The foregoing was subscribed to and sworn to before me this <u>16th</u> day of			
<u>May</u> , <del>199</del> <sup>XXX</sup> <u>2000</u> , by <u>Dan Bennewitz</u>			
(Name of signatory)			
		<u>Vivian R. Powers</u>	
(Signature of Notary Public)		(Name of Notary Public)	
My commission expires <u>1/5/03</u>			

**Table 1: Contaminant Codes**

Represent heavy metals and salts by using the abbreviations designated in the periodic table of elements.

<b>Volatile Organics</b>			
acetone	ACT	1,2-trans-dichloroethylene	TDCE
benzene	BZ	1,2-dichloropropane	DCPA
carbon tetrachloride	CTC	1,3-dichloropropene	DCPE
chlorobenzene	CBZ	1,3-dichloropropylene	DCPE
chloroethane	CEA	ethylbenzene	EBZ
2-chloroethylvinyl ether	CVE	methylene chloride	MC
chloroform	CFM	methyl ethyl ketone	MEK
1,2-dibromoethane	EDB	methyl isobutyl ketone	MIBK
1,2-dichlorobenzene	2DCB	methyl tert-butyl ether	MTBE
1,3-dichlorobenzene	3DCB	tetrachloroethylene	PCE
1,4-dichlorobenzene	4DCB	toluene	TL
dichlorodifluoromethane	DDM	1,1,1-trichloroethane	TCA
1,1-dichloroethane	11DCA	trichloroethylene	TCE
1,2-dichloroethane	12DCA	trichlorofluoromethane	TCFM
1,1-dichloroethylene	11DCE	vinyl chloride	VC
		xylene	XYL
<b>Miscellaneous</b>			
	cyanide		CN
	total petroleum hydrocarbons		TPH

**Table 2: Towns required to establish Aquifer Protection Areas**

Avon	Darien	Madison	Oxford	Stamford
Beacon Falls	Derby	Manchester	Plainfield	Stonington
Berlin	East Lyme	Mansfield	Plainville	Thomaston
Bethany	East Windsor	Meriden	Plymouth	Thompson
Bethel	Enfield	Middletown	Portland	Tolland
Bethlehem	Essex	Monroe	Prospect	Torrington
Bolton	Fairfield	Montville	Putnam	Vernon
Bozrah	Farmington	Naugatuck	Ridgefield	Wallingford
Bristol	Glastonbury	New Canaan	Rocky Hill	Watertown
Brooklyn	Granby	New Hartford	Salisbury	Westbrook
Burlington	Goshen	New Milford	Seymour	Weston
Canton	Griswold	Newtown	Shelton	Westport
Cheshire	Guilford	North Canaan	Simsbury	Willington
Clinton	Hamden	North Haven	Somers	Windsor
Colchester	Killingly	Norwalk	Southbury	Windsor Locks
Coventry	Killingworth	Norwich	Southington	Woodbury
Cromwell	Ledyard	Old Lyme	South Windsor	
Danbury	Litchfield	Old Saybrook	Stafford	